Consumer Confidence Report – 2010

City of Great Falls Public Drinking Water Supply

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This report is prepared annually by the City of Great Falls Water Utility. Its purpose is to evoke confidence in the quality of our municipal drinking water. Please take a few minutes to review it and feel free to call us with any questions.

The source of our water

The drinking water used by the residents of Great Falls, Malmstrom Air Force Base and Black Eagle is water that was pumped from the Missouri River and treated to make it safe to drink. The water treatment facility is located just upstream from the Missouri's confluence with the Sun River in Great Falls.

Water treatment and purification

Great Falls utilizes a conventional water treatment process, producing on average 4.5 billion gallons of safe drinking water per year. The process is monitored continuously and samples of treated water are collected and analyzed. Only after careful scrutiny is water allowed to flow through underground water mains to reservoirs for use in homes and businesses.

City water personnel stay abreast of new Federal and State drinking water regulations as they are written so that treatment and/or monitoring changes can be implemented as needed in a timely and cost-effective manner. The City is committed to the goal of providing its citizens with a safe and dependable supply of drinking water. This goal was achieved during 2010 by operating without any violations, exemptions or variances regarding water quality.

"I am pleased to report that our drinking water meets all federal and state requirements and is among the safest and best-tasting in the world."

-- John Wandke, City Water Quality Specialist

Are there contaminants in our source water?

Water that precipitates from the atmosphere flows across the surface of the land or percolates through the soil. Naturally occurring minerals dissolve and waste substances produced by plants, animals and humans are picked up. The water then either becomes groundwater or makes its way to a stream, river, pond, lake or reservoir. This accumulated water can then be used as a drinking water source.

Contaminants that may need to be removed from a source water before it can be considered safe to drink include:

- microbial contaminants, including viruses, bacteria and protozoa. These can originate from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- inorganic contaminants, such as salts and metals. These can be naturally occurring or the result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- pesticides and herbicides. These may come from a variety of sources including agriculture, urban storm water runoff and residential uses.
- organic chemical contaminants, including synthetic and volatile organic chemicals. These are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.
- radioactive contaminants. These can be naturally occurring or the result of oil and gas production or mining activities.

Montana's Department of Environmental Quality (DEQ) recently completed and made available the Great Falls source water delineation and assessment report. This report delineates a source water protection area for Great Falls (an area of surface water and land that contributes water to the Great Falls Public Water Supply). It also identifies locations or regions within this area where contaminants might be generated, stored or transported and addresses their relative potential for contaminating Great Falls drinking water. The report can be used to develop a source water protection plan for Great Falls.

Do I need to take special precautions?

The Environmental Protection Agency diligently establishes regulations setting allowable limits for contaminants in drinking water delivered by public water systems. The Food and Drug Administration regulates contaminants in bottled water, affording equivalent protection to public health. Any drinking water may be reasonably expected to contain allowable amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily mean the water will pose a health risk. Detailed information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or our local City-County Health Department (454-6950).

Certain people may be more vulnerable to contaminants in drinking water than the general population. For example, immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons having HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections caused by certain microbiological contaminants. These people should seek advice about their drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

How can I become involved?

You can learn more about your local water utility by attending any of the regularly scheduled City Commission meetings on the first and third Tuesdays of every month at 7:00 p.m. in the Commission Chambers at the Great Falls Civic Center. You may also arrange a tour of the local water treatment plant by calling 727-1325. Regulatory updates and other interesting information can be found by visiting the American Water Works Association web site at http://www.awwa.org.

Questions & Answers

Q: How often is our drinking water tested?

A: The type and frequency of testing required is based on the water's source and the number of people served. Great Falls is classified as a medium-sized (between 50,000 and 100,000 served) surface water (Missouri River) community public water supply. As such, Great Falls is required to monitor the levels of some drinking water constituents, such as disinfectant residual, continuously while other constituents, such as radionuclides, are required to be tested only once every several years. The data presented in the tables contained in this report are the results from the most recent testing done in accordance with the applicable regulations.

Q: Why does the water coming out of my tap look milky sometimes but then clear up in my glass after a few seconds?

A: The water coming into your home may contain harmless dissolved gases (air) held in solution by the pressure of the water system. As the water leaves the tap the pressure rapidly decreases causing millions of tiny air bubbles to be suspended in the water, producing the milky appearance. The water then clears from the bottom of the container as the air bubbles rise and return to the atmosphere.

Q: How hard is Great Falls water?

A: Great Falls water is classified as moderately hard, ranging from 127 to 167 milligrams per liter (7.4 to 9.8 grains per gallon) as calcium carbonate. Some households install water softeners as a matter of personal preference but softening is generally not necessary.

Some Facts About Water

Of the 326 million cubic miles of water on earth, 97% is seawater. Of the remaining 3%, 77% is frozen and 22% is underground. This leaves each person on our planet enough liquid fresh surface water to fill a cube 130 feet on a side. But the water is not evenly distributed and is in constant demand.

One gallon of water weighs about 8⅓ pounds.

Average total water use (both indoor and outdoor) for a typical single-family home is about 100 gallons per person per day.

You can fill an 8-ounce glass with drinking water 15,000 times for the same cost as a six-pack of soda.

You can survive about a month without food, but only 5 to 7 days without water.

Water Analysis Data

The data tables on the next several pages contain terms and abbreviations with which you may be unfamiliar. In order to help you better understand this data we offer the following definitions and explanations:

parts per million (ppm) or milligrams per liter (mg/l) - one part per million is equivalent to one minute in two years or one penny in $10,000.

parts per billion (ppb) or micrograms per liter (µg/l) - one part per billion is equivalent to one minute in 2,000 years or one penny in $10,000,000.

picocuries per liter (pCi/l) - a measure of radioactivity in water.

millirems per year (mrem/yr) - a measure of radiation exposure. In the United States, the average person is exposed to an effective dose equivalent of approximately 360 mrem (whole body exposure) per year from all sources.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Water having turbidity in excess of 5 NTU would appear noticeably cloudy to the average person.

Maximum Contaminant Level Goal - the "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level - the "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfection Level Goal or MRDLG - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfection Level or MRDL - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

The City of Great Falls routinely monitors for contaminants in drinking water according to Federal and State laws. The four data tables included in this report document the test results from monitoring during the period January 1st through December 31st, 2010. The State of Montana requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore some of the following data, though representative, are more than one year old. The tables are arranged as follows:

Table I. Regulated Contaminants Detected
Table II. Unregulated Contaminants Detected
Table III. Regulated Contaminants Not Detected
Table IV. Unregulated Contaminants Not Detected

Additional copies of this report are available free of charge from the Great Falls Water Treatment Plant. If you have any questions about this report or your water utility contact John Wandke at (406) 727-1325.

Table I. Regulated Contaminants Detected

Contaminant	Likely Source of Contamination	Unit of Measurement	MCL	MCLG	Date Sampled	Level Detected	Violation (yes/no)
Arsenic	erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	ppb	10	0	2/22/10	2	no
Fluoride	erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	ppm	4	4	2/22/10	0.7 *(all of it naturally-occurring)*	no
Nitrate plus Nitrite (as Nitrogen)	runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	ppm	10	10	2/22/10	0.17	no
Lead *Note: In a sample collected 2/22/10, no lead was detected in the treated water as it left the water treatment plant.*	corrosion of household plumbing systems; erosion of natural deposits	ppb	AL = 15 90^{th} percentile level must be less than 15	15	30 tests from high-risk* homes during July, August and September, 2010	5 @ 90^{th} percentile (see below) one site was ≥ 15 ppb	no
Copper *Note: In a sample collected 2/22/10, no copper was detected in the treated water as it left the water treatment plant.*	corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	ppm	AL = 1.3 90^{th} percentile level must be less than 1.3	1.3	30 tests from high-risk* homes during July, August and September, 2010	0.38 @ 90^{th} percentile (see below) one site exceeded 1.3 ppm	no

LEAD AND COPPER RULE SAMPLING SUMMARY (triennial samples)

Note:
Each sample collected for lead analysis was also analyzed for copper. In this report the sites are separately numbered 1-30 based on descending levels of lead or copper, that is, the site having the highest level of lead did not necessarily also have the highest level of copper.

90^{th} percentile levels →

** The 1994 Federal Lead & Copper Rule mandates a household testing program for these substances. Under the provisions of the Lead & Copper Rule high-risk sites include, but are not limited to, single-family residences served by a lead service line, having interior lead piping or having lead-soldered copper pipe installed after 1982 but prior to Montana's ban on lead solder, which began December 31, 1987. According to the Rule, 90% of the samples from high-risk homes must have lead levels less than 15 ppb and copper levels less than 1.3 ppm.*

Samples were collected from water that had remained within the building's interior plumbing for a period of at least six hours. Lead and copper levels below the MCL indicated water that was not corrosive to lead or copper plumbing.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Great Falls is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Site Ranking	Lead Range high to low	Copper Range high to low
1	37	2.75
2	14	0.89
3	7	0.52
4	5	0.38
5	5	0.37
6	4	0.36
7	3	0.34
8	3	0.34
9	3	0.30
10	3	0.29
11	2	0.24
12	2	0.22
13	2	0.21
14	2	0.19
15	2	0.16
16	2	0.16
17	1	0.16
18	1	0.15
19	1	0.15
20	1	0.15
21	1	0.14
22	1	0.12
23	< 1	0.11
24	< 1	0.11
25	< 1	0.07
26	< 1	0.07
27	< 1	0.07
28	< 1	0.06
29	< 1	0.04
30	< 1	0.03

Contaminant (Table I. continued)	Likely Source of Contamination	Unit of Measurement	MCL	MCLG	Date Sampled	Level Detected	Violation (yes/no)
Turbidity *Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the water filtration system.*	soil runoff	NTU	TT = 1 NTU maximum	0	throughout the year, every four hours	0.14 maximum for 2010 on 4/5/10	no
		NTU	TT < 0.3 NTU 95% of the time	0	throughout the year, every four hours	< 0.3 100% of the time	no
Radionuclides							
Beta/photon emitters	decay of natural and man-made deposits	mrem/yr	4	0	2/23/99	2.7 (± 2.7) pCi/l gross beta	no
Gross Alpha	erosion of natural deposits	pCi/l	15	0	7/28/08	3.8	no
Radium 226 + Radium 228	erosion of natural deposits	pCi/l	5	0	7/28/08	0.1	no
Disinfectants							
Chlorine	water additive used to control microbes	ppm	MRDL=4	MRDLG=4	continuously	0.03 to 1.88	no
Chloramines[†]	water additive used to control microbes	ppm	MRDL=4	MRDLG=4	continuously	0.03 to 1.88	no

[†] **The primary disinfectant** used in Great Falls is free chlorine. Through the addition of ammonia, monochloramine is formed just before the water exits the treatment plant. Monochloramine does not dissipate as readily as free chlorine and thus helps in maintaining disinfection at the far edges of the distribution system. Compared to free chlorine, monochloramine is a weak oxidizer and so minimizes disinfection by-product formation. Total chlorine levels were checked at the treatment plant and throughout the distribution system on a daily basis during 2010 and at no time exceeded the MRDL or the MRDLG. Levels ranged from a low of 0.03 ppm in the distribution system to a high of 1.88 ppm in water leaving the treatment plant.

Disinfection By-Products (DBPs)

TTHMs (total trihalomethanes)	by-product of drinking water disinfection	ppb	80 run. ann. avg.[‡]	N/A	quarterly	see table below	no
HAA5s (five haloacetic acids)	by-product of drinking water disinfection	ppb	60 run. ann. avg.[‡]	N/A	quarterly	see table below	no

TTHM Summary **sampling period →**	2nd quarter 2009	3rd quarter 2009	4th quarter 2009	1st quarter 2010	2nd quarter 2010	3rd quarter 2010	4th quarter 2010
site # 1	33.8	59.2	37.1	33.3	41.4	52.6	47.1
site # 2	39.8	62.2	44.9	37.6	49.4	52.5	52.1
site # 3	34.1	59.1	39.6	34.4	40.5	52.5	42.9
site # 4	34.1	65.2	45.6	37.8	55.2	55.6	54.1
quarterly average	35.5	61.4	41.8	35.8	46.6	53.3	49.1
[‡]running annual average	41.8	42.2	42.8	43.6	46.4	44.4	46.2

highest compliance level for 2010 = 46.4 range = 33.3 to 55.6

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA5 Summary **sampling period →**	2nd quarter 2009	3rd quarter 2009	4th quarter 2009	1st quarter 2010	2nd quarter 2010	3rd quarter 2010	4th quarter 2010
site # 1	26.0	53.0	40.0	36.0	40.1	62.1	52.2
site # 2	36.4	47.0	34.5	36.4	45.5	43.2	23.0
site # 3	26.0	51.0	41.0	33.0	43.4	60.7	51.4
site # 4	35.4	49.0	28.2	31.0	62.7	48.4	36.4
quarterly average	31.0	50.0	35.9	34.1	47.9	53.6	40.8
[‡]running annual average	32.1	34.5	36.1	37.8	42.0	42.9	44.1

highest compliance level for 2010 = 44.1 range = 23.0 to 62.7

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Total Organic Carbon (TOC) provides a medium for the formation of disinfection by-products, which include TTHMs and HAA5s. Removing TOC at the water treatment plant is important in reducing the potential for the formation of all disinfection by-products, both regulated and unregulated.

Date Sampled	River Water TOC	Treated Water TOC	% Removal Required	% Removal Achieved
1/19/10	3.0 ppm	2.3 ppm	15.0	23.3
2/08/10	3.1 ppm	2.4 ppm	15.0	22.6
3/15/10	2.8 ppm	2.4 ppm	15.0	14.3
4/12/10	2.8 ppm	2.3 ppm	15.0	17.9
5/10/10	2.8 ppm	2.3 ppm	15.0	17.9
6/07/10	3.5 ppm	2.2 ppm	15.0	37.1
7/19/10	3.0 ppm	2.3 ppm	15.0	23.3
8/09/10	2.9 ppm	2.2 ppm	15.0	24.1
9/20/10	3.0 ppm	2.2 ppm	15.0	26.7
10/28/10	3.1 ppm	2.4 ppm	15.0	22.6
11/15/10	3.1 ppm	2.3 ppm	15.0	25.8
12/13/10	3.0 ppm	2.2 ppm	15.0	26.7

Secondary Contaminants (Table I. continued)				
Secondary Parameter	Date Sampled	Level Detected	Unit of Measurement	SMCL**
Calcium	2/22/10	37	ppm	N/A
Magnesium	2/22/10	12	ppm	N/A
Sodium	2/22/10	18	ppm	< 20 recommended
Total Hardness	1/22/08	141	ppm	N/A
Total Alkalinity	2/22/10	115	ppm	N/A
Conductivity	2/22/10	434	micromhos/cm	N/A
pH	2/22/10	7.4	pH units	6.5 - 8.5
Langelier Index	2/22/10	-0.3	N/A	N/A

*** Secondary Maximum Contaminant Level (SMCL) - a chemical contaminant in excess of this amount may affect aesthetic qualities and public acceptance. SMCLs are non-enforceable standards.*

Table II. Unregulated Contaminants Detected

Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Radionuclides	Date Sampled	Level Detected	Unit of Measurement	Significance
Radon-222	1/09/95	47 (± 37)	pCi/l	see comments below

About radon: There is currently no federal regulation for radon in drinking water. Radon is a radioactive gas that you can't see, taste or smell. It is found all over the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water that contains radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (4pCi/l) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (1-800-SOS-RADON).

Inorganic Contaminants	Date Sampled	Level Detected	Unit of Measurement	SMCL
Bicarbonate	1/16/07	147	ppm	N/A
Chloride	2/22/10	11	ppm	250
Potassium	1/16/07	4	ppm	N/A
Silica	2/22/10	18.0	ppm	N/A
Strontium	2/22/10	200	ppb	N/A
Sulfate	2/22/10	44	ppm	500

The following three disinfection by-products are volatile organics that are not regulated individually but are included in total trihalomethanes:

Contaminant	Date Sampled	Level Detected	Unit of Measurement
Bromodichloromethane	6/03/10	6.4	ppb
Chlorodibromomethane	6/03/10	0.49	ppb
Chloroform	6/03/10	42	ppb

Table III. Regulated Contaminants Not Detected

Radionuclides – tested 7/28/08

Note: testing for uranium was not required because the result for gross alpha did not exceed the MCL of 15 pCi/l (see Table 1)

Microbiological Contaminants – tested throughout 2010, 70 routine distribution system samples per month

Total Coliform Bacteria	*Escherichia coli*

Inorganic Contaminants – all tested 2/22/10 unless otherwise indicated

Antimony	Cadmium	Iron	Nickel
Asbestos (11/24/03)	Chromium	Lead	Selenium
Barium	Copper	Manganese	Thallium
Beryllium	Cyanide (1/30/06)	Mercury	

Volatile Organic Contaminants (VOCs) – all tested 6/03/10 unless otherwise indicated

Benzene	1,1-Dichloroethene	Styrene	Toluene
Carbon tetrachloride	cis-1,2-Dichloroethene	Tetrachloroethene	Vinyl chloride
Chlorobenzene	trans-1,2-Dichloroethene	1,2,4-Trichlorobenzene	Xylenes (ortho-, meta-, para-)
1,2-Dichlorobenzene	Methylene chloride	1,1,1-Trichloroethane	1,2-Dibromo-3-chloropropane
1,4-Dichlorobenzene	1,2-Dichloropropane	1,1,2-Trichloroethane	Total BTEX
1,2-Dichloroethane	Ethylbenzene	Trichloroethene	

Synthetic Organic Contaminants (SOCs) – all tested 5/12/08, 6/23/08 and 8/18/08 unless otherwise indicated (Table III. continued)		
2,4,-D	Dibromochloropropane (DBCP) (6/13/05)	Hexachlorobenzene
2,4,5-TP (Silvex)	Dinoseb	Hexachlorocyclopentadiene (HEX)
Alachlor	Diquat (deferred)	Lindane (gamma-BHC)
Atrazine	Dioxin (2,3,7,8-TCDD) (deferred)	Methoxychlor
Benzo(a)pyrene (PAH)	Endothall (deferred)	Oxamyl (Vydate)
Carbofuran	Endrin	Polychlorinated biphenyls (PCB's) (8/08/05)
Chlordane	Ethylene dibromide (EDB) (6/13/05)	Pentachlorophenol
Dalapon	Glyphosate (6/13/05)	Picloram (Tordon)
Di(2-ethylhexyl)adipate	Heptachlor	Simazine
Di(2-ethylhexyl)phthalate	Heptachlor epoxide	Toxaphene

Table IV. Unregulated Contaminants Not Detected

Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Inorganic Contaminants – all tested 2/22/10 unless otherwise indicated				
Aluminum	Carbonate (1/16/07)	Molybdenum	Silver	Zinc

Volatile Organic Contaminants (VOCs) – all tested 6/03/10 unless otherwise indicated			
Bromobenzene	1,3-Dichlorobenzene	1,2,3-Trichloropropane	n-Propylbenzene
Bromoform	1,1-Dichloroethane	Bromochloromethane	sec-Butylbenzene
Bromomethane	1,3-Dichloropropane	n-Butylbenzene	tert-Butylbenzene
1,2-Dibromoethane	2,2-Dichloropropane	Dichlorodifluoromethane	1,2,3-Trichlorobenzene
Chloroethane	1,1-Dichloropropene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Chloromethane	cis-1,3-Dichloropropene	Hexachlorobutadiene	1,3,5-Trimethylbenzene
2-Chlorotoluene	trans-1,3-Dichloropropene	Isopropylbenzene	Methyl tert-Butyl Ether (MTBE)
4-Chlorotoluene	1,1,1,2-Tetrachloroethane	p-Isopropyltoluene	
Dibromomethane	1,1,2,2-Tetrachloroethane	Naphthalene	

Synthetic Organic Contaminants (SOCs) – all tested 5/12/08, 6/23/08 and 8/18/08 unless otherwise indicated			
Aldrin	3-Hydroxycarbofuran	Aldicarb (Temik)	Dichlorprop
Butachlor	Methomyl	Aldicarb Sulfone	Methiocarb
Carbaryl	Metolachlor	Aldicarb Sulfoxide	
Dicamba	Metribuzin	Acifluorfen (8/08/05)	
Dieldrin	Propachlor	2,4-DB	

Unregulated Contaminant Monitoring Rule 1 (UCMR1) Contaminants – all tested 10/23/01, 1/02/02, 4/08/02 and 7/01/02			
Perchlorate	MTBE	2,4-Dinitrotoluene	EPTC
DCPA mono-acid	Nitrobenzene	2,6-Dinitrotoluene	Molinate
DCPA di-acid	Acetochlor	4-4'-DDE	Terbacil

Unregulated Contaminant Monitoring Rule 2 (UCMR2) Contaminants – all tested 3/10/08, 6/30/08, 9/15/08 and 12/15/08				
Dimethoate	2,2',4,4',5,5'-HBB	BDE-99	BDE-153	2,4,6-Trinitrotoluene (TNT)
Terbufos Sulfone	BDE-47	BDE-100	1,3-Dinitrobenzene	RDX

In Summary, analysis of Great Falls drinking water revealed no violations during 2010. Although some constituents were detected, the Environmental Protection Agency considers water to be safe at these levels. Furthermore, MCLs are set very stringently. To put this into perspective, for a given regulated contaminant a person would have to drink 2 liters of water every day at the MCL level for a lifetime for there to be a one-in-a-million chance of having a corresponding adverse health effect.

Important additional information regarding source water monitoring:

During 2007 Great Falls collected monthly water samples directly from the Missouri River intake and had them analyzed for *Cryptosporidium*, a microbial pathogen found in surface water throughout the United States. Although the filtration aspect of our water treatment process removes *Cryptosporidium* it cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in our source water during the months of February, April, July, September, October and December. Current test methods do not allow us to determine whether the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.